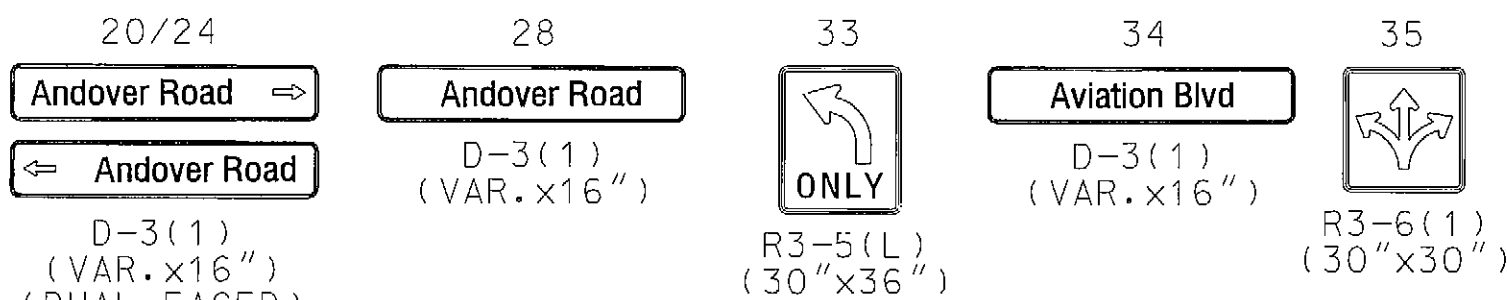
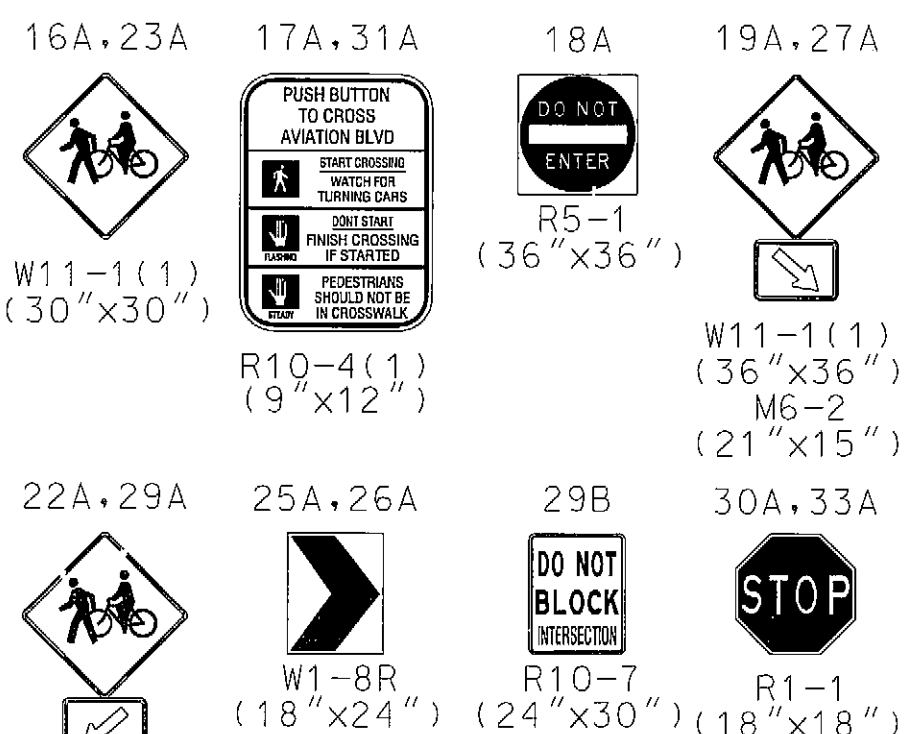


MD 162 IS ASSUMED TO RUN
IN A NORTH-SOUTH DIRECTION

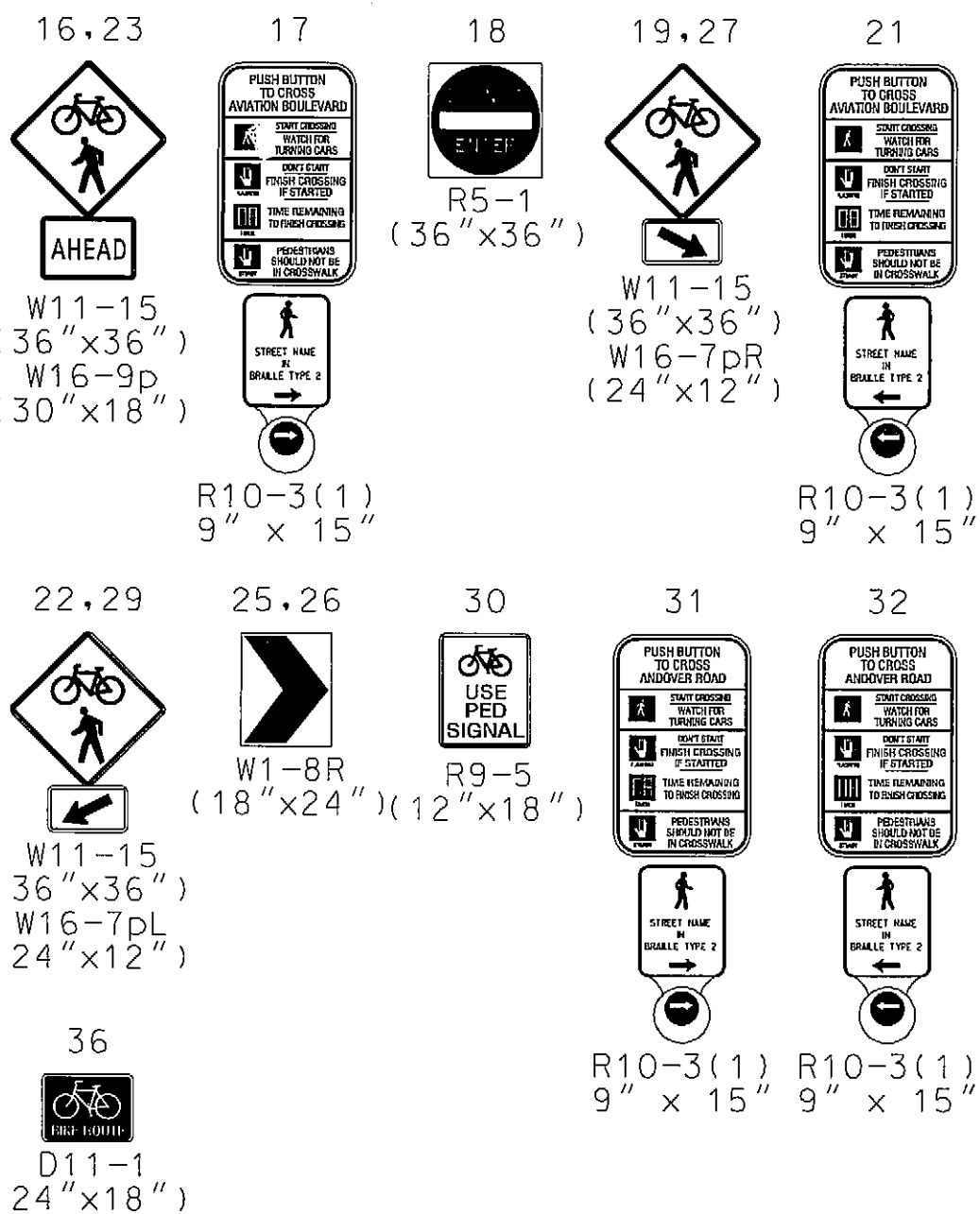
EXISTING SIGNS TO REMAIN



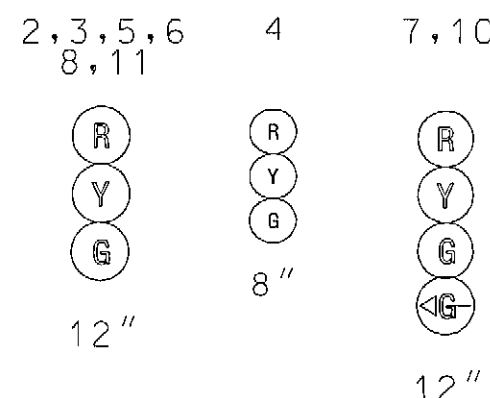
EXISTING SIGNS TO BE REMOVED



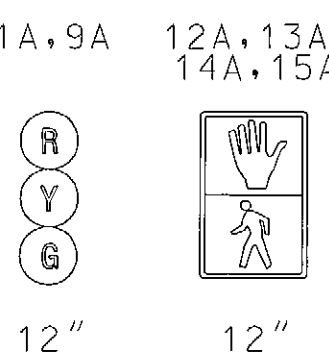
PROPOSED SIGNS



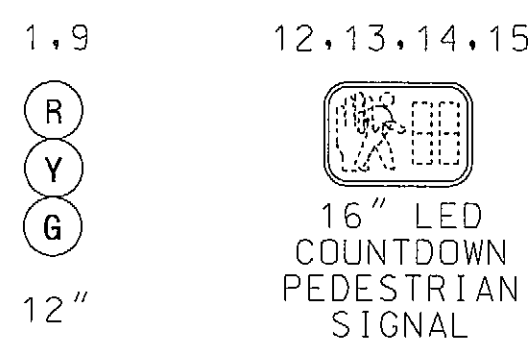
EXISTING SIGNAL HEADS TO REMAIN



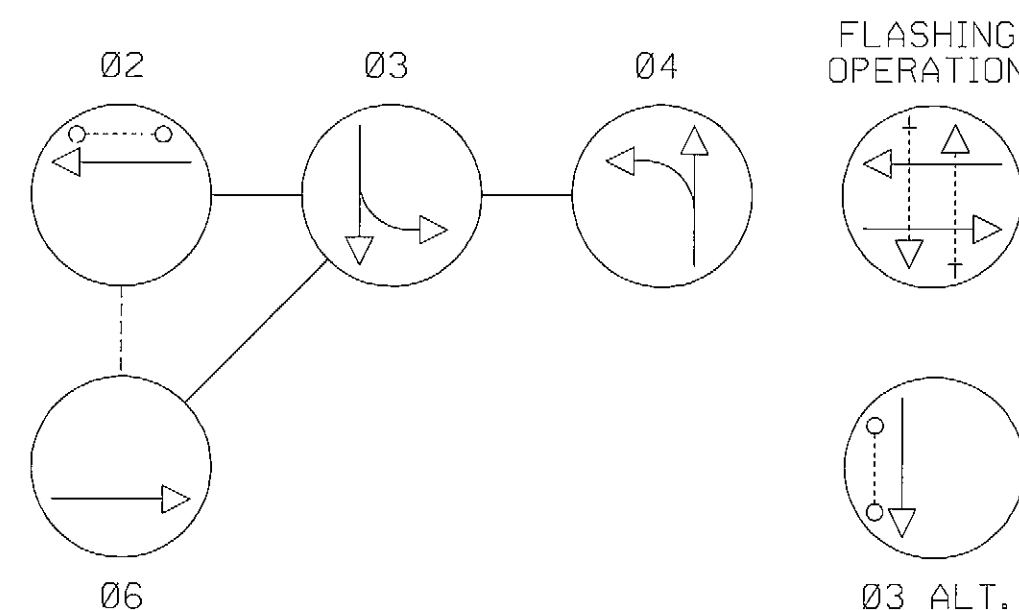
EXISTING SIGNAL HEADS TO BE REMOVED



PROPOSED SIGNAL HEADS



NEMA PHASING



NOTE:
PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

GENERAL NOTES

- ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS. HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
- THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO INSTALLING PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS SHOULD ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
- THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE LOCATIONS PRIOR TO INSTALLATION.
- ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE NEW SIGNAL.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
- REMOVE AND DISPOSE OF ALL UNUSED SIGNAL CABLE.
- PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18" FROM A 60" x 60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
- THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
- PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
- LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09 AND FIG. 4E-2 AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE". IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
- REFER TO TSP-2 FOR DIMENSIONS OF SIGNAL EQUIPMENT AND PAVEMENT MARKINGS WITHIN INTERSECTION.

TOD NO: XY139-03
SHA NO: AA189B53
MD 162, MD 170, MD 176 @ Various
Locations

CONSTRUCTION DETAILS

- INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE STANDARD NO. MD 801.01-01. COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING RIGHT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS AVIATION BOULEVARD"). (INSTALL 1-2 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
- INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE STANDARD NO. MD 801.01-01. COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING LEFT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS AVIATION BOULEVARD"). (INSTALL 1-2 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
- INSTALL CONCRETE FOUNDATION WITH 5 FT. STEEL PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE STANDARD NO. MD 801.01-01. AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING RIGHT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS ANDOVER ROAD"). (INSTALL 1-2 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
- INSTALL CONCRETE FOUNDATION WITH 14 FT. STEEL PEDESTAL POLE WITH BREAKAWAY BASE. SIGNAL HEADS, COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING LEFT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS ANDOVER ROAD"). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
- USE EXISTING MAST ARM POLE. REMOVE EXISTING PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN SIGN HEAD ELECTRICAL CABLE. INSTALL COUNTDOWN PEDESTRIAN SIGNAL HEAD AND NEW PEDESTRIAN SIGNAL HEAD ELECTRICAL CABLE. CLEAN EXISTING DRILLED HOLES WITH A WIRE BRUSH AND SPRAY COLD GALVANIZING COMPOUND.
- INSTALL 2 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
- INSTALL 12 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR CROSSWALKS.
- USE EXISTING BASE MOUNTED CABINET AND CONTROLLER. INSTALL AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON BASE UNIT.
- USE EXISTING CONDUIT.
- REMOVE EXISTING PEDESTAL POLE, COUNTDOWN PEDESTRIAN SIGNAL HEAD, PUSHBUTTON AND SIGNS. REMOVE AND DISPOSE OF EXISTING FOUNDATION 12 IN. BELOW GRADE AND BACKFILL.
- REMOVE EXISTING PAVEMENT MARKINGS.
- CAP AND ABANDON EXISTING CONDUIT.
- REMOVE EXISTING SIDEWALK RAMP AND/OR SIDEWALK AND INSTALL SIDEWALK RAMP (STD. NO. MD 655.12) AND DETECTABLE WARNING SURFACE IN ACCORDANCE WITH STD. NO. MD 655.40.
- INSTALL COMBINATION CONCRETE CURB AND GUTTER (STD. NO. MD 620.02 TYPE "A").
- REMOVE EXISTING SIDEWALK RAMP AND/OR SIDEWALK AND INSTALL 5 IN. CONCRETE SIDEWALK.
- REMOVE EXISTING HOT MIX ASPHALT PAVEMENT AND INSTALL 5 IN. CONCRETE SIDEWALK AND DETECTABLE WARNING SURFACE IN ACCORDANCE WITH STD. NO. MD 655.40.
- REMOVE EXISTING SIDEWALK, BACKFILL, SEED & MULCH.
- USE EXISTING HANDHOLE. ADJUST TO FINAL GRADE.
- INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
- REMOVE EXISTING PEDESTAL POLE, SIGNAL HEADS, COUNTDOWN PEDESTRIAN SIGNAL HEAD, PUSHBUTTON AND SIGNS. REMOVE AND DISPOSE OF EXISTING FOUNDATION 12 IN. BELOW GRADE AND BACKFILL.
- INSTALL 5 IN. CONCRETE SIDEWALK.
- INSTALL PROPOSED SIGNS ON (1) 4"x4" TREATED WOOD SUPPORT (L=18.0') AS SHOWN.
- INSTALL PROPOSED SIGNS ON (1) 4"x6" TREATED WOOD SUPPORT (L=17.5') AS SHOWN.
- INSTALL 24 IN. CONCRETE CURB WITHOUT GUTTER (STD. NO. 620.02) AT THE BACK OF THE SIDEWALK RAMP (PAID FOR UNDER STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH).
- INSTALL PROPOSED SIGNS ON (2) 4"x6" TREATED WOOD SUPPORTS (L=18.25' EACH) AS SHOWN.
- INSTALL PROPOSED SIGNS ON (1) 4"x4" TREATED WOOD SUPPORT (L=14.0') AS SHOWN.
- INSTALL PROPOSED SIGNS ON (1) 4"x6" TREATED WOOD SUPPORT (L=15.5') AS SHOWN.
- INSTALL 5 INCH HEAT APPLIED WHITE PERMANENT PAVEMENT MARKINGS (3 FOOT LINE WITH 3 FOOT GAP).
- INSTALL 24 IN. CONCRETE CURB WITHOUT GUTTER (STD. NO. 620.02) AT THE BACK OF THE SIDEWALK RAMP (PAID FOR UNDER STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH).
- REMOVE EXISTING STOP SIGN ONLY. EXISTING "BIKES USE PED SIGNAL" SIGN TO REMAIN.
- REMOVE EXISTING BRICK PAVEMENT MEDIAN AND INSTALL CONCRETE MEDIAN CUT-THROUGH (STD. NO MD 655.21) AND DETECTABLE WARNING SURFACES IN ACCORDANCE WITH STD. NO. MD 655.40.

SPECIAL NOTE:

CONTRACTOR SHALL USE CAUTION WHEN INSTALLING SIGNAL EQUIPMENT TO AVOID DISTURBANCE OF EXISTING UNDERGROUND UTILITIES. CONTRACTOR SHALL TEST PIT TO DETERMINE EXACT LOCATION AND DEPTH OF UNDERGROUND UTILITIES PRIOR TO INSTALLING SIGNAL EQUIPMENT.

GEOMETRIC LEGEND

EXISTING
PROPOSED

UTILITY LEGEND

SD—SD— STORM DRAIN
G—G— GAS MAIN
W—W— WATER MAIN
S—S— SEWER MAIN
E—E— ELECTRIC CABLES
A—A— AERIAL CABLES
T—T— TELEPHONE CABLES
F—F— FIBER-OPTIC

APPROVALS

TEAM LEADER
ASST. DIV. CHIEF
DIVISION CHIEF
OFFICE DIRECTOR

REVISIONS

① ADDED APS/CPS AND ADA COMPLIANT CURB RAMP. TMS NO. L653
SHA NO. XY139185 01/2013
② ADD INTERCONNECT
SHA NO. XX1085185 5/10/2002
③ INSTALL PEDESTRIAN POLE AND PEDESTRIAN SIGNALS
SHA NO. AA463-501-571 5/23/1992

TRAFFIC SIGNAL PLAN

SCALE 1" = 20' DATE 5/07 CONTRACT NO. AA 132-533-572
DESIGNED BY COUNTY ANNE ARUNDEL
DRAWN BY C.J.B. OF KIDDE LOGMILE 0216201.85
CHECKED BY T.A.R. OF KIDDE TMS NO. E 451
F.A.P. NO. AA 463-501-571 TOD NO.
TS NO. 2337E DRAWING TSP-28 OF 33 SHEET NO. 28 OF 33

PLOTTED: February 08, 2013
FILE: N:\1669-257\CADD\SSG-TSP28_MD162_Anderover.dgn

WR&A
WHITMAN, REQUARDT
& ASSOCIATES, LLP
801 South Caroline Street, Baltimore, Maryland 21231

BY: bdonaway